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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/653,307	09/02/2003	Charles Cafrelli	03-793	2773
7590 Richard A. Machonkin McDonnell Boehnen Hulbert & Berghoff 32nd Floor 300 S. Wacker Drive Chicago, IL 60606			EXAMINER KHAKHAR, NIRAV K	
			ART UNIT 2167	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/653,307

Applicant(s)

CAFRELLI ET AL.

Examiner

Nirav K. Khakhar

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2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 20-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/9/04; 9/13/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. An applicant's duty of disclosure of material and information is not satisfied by presenting a patent examiner with "a mountain of largely irrelevant [material] from which he is presumed to have been able, with his expertise and with adequate time, to have found the critical [material]. It ignores the real world conditions under which examiners work." *Rohm & Haas Co. v. Crystal Chemical Co.*, 722 F.2d 1556, 1573 [220 USPQ 289] (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). (Emphasis in original).

Double Patenting Claim Objections

2. Claims 13 and 17 are objected to under 37 C.F.R. § 1.75 as being a substantial duplicate of claims 3 and 7. Applicant is advised that should claims 3 and 7 be found allowable, claims 13 and 17 will be objected to under 37 C.F.R. § 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same subject matter, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Appropriate correction is required.

Claim Objections

3. Claims 18 and 19 are objected to because of the following informalities:

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Claims 18, and 19, which depends from 18, recite the limitation "sparse map".

There is insufficient antecedent basis for this limitation in the claims. There is no indication of a sparse map in Claim 1, from which Claim 18 depends. For purposes of compact prosecution, Claim 18 is interpreted as if it depends from Claim 11, and not Claim 1 as indicated, as it seems to be better suited as a dependent of Claim 11, which does make reference to sparse sets. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Szabo, U.S. Pat. No. 5,966,126 (hereafter, "Szabo").

As to **Claim 1**, Szabo discloses: a method for accessing information from an overall collection of metadata records, wherein the overall collection includes a local database of metadata records and a remote database of metadata records (col. 6, lines 40 – 54, referring to local and remote databases of records, the records being of various types of data), and wherein each metadata record in the

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overall collection includes information regarding a particular digital media source (col. 9, lines 27 – 33, referring to types of files for which the system is applicable, images and audio being two), the method comprising:

in response to user interaction with a user interface, identifying at least one selection criterion for selecting metadata records from which to display

information (col. 6, lines 40 – 54, referring to user-defined selection criteria);

retrieving a candidate set of metadata records from the remote database (col. 9, lines 27 – 33, referring to a broad search and a resulting data set that is to be further refined);

identifying a remote set of metadata records in the candidate set that satisfy the at least one selection criterion (col. 9, lines 33 – 38, referring to the further refinement of an initially broad search result set);

identifying a local set of metadata records in the local database that satisfy the at least one selection criterion (col. 9, lines 27 – 33, referring to a broad search and a resulting data set that is to be further refined);

merging the remote set and the local set to produce a merged set of metadata records that satisfy the at least one selection criterion (col. 7, lines 43 – 67, referring to generating a result set from each database based on selection criteria and merging those sets); and

displaying selected information from at least one metadata record in the merged set (col. 25, lines 31 – 43, referring to displaying to the user, via the interface, the result sets and selection criteria).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2, 3, 6, and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Szabo, in view of Mastronardi, U.S. Pat. No. 6,346,951 (hereafter, "Mastronardi").

As to **Claim 2**, Szabo does not appear to explicitly disclose the limitation of:
displaying at least one artist name.

Mastronardi discloses: displaying at least one artist name (col. 6, lines 8 – 9, referring to a display section that shows the artist name or group, making the artist name one of the possible pieces of information about a record in a result set).

Szabo and Mastronardi are both in the related art of displaying database results to a user.

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It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo and Mastronardi before him/her, to have modified the system of Szabo with the display of an artist name from Mastronardi, in order to make the artist name one of the possible pieces of information about a record in a result set.

As to **Claim 3**, Szabo does not appear to explicitly disclose the limitation of displaying at least one album title.

Mastronardi discloses: displaying at least one album title (col. 6, lines 5 – 7, referring to a display section that shows the album title, making the album title one of the possible pieces of information about a record in a result set).

Szabo and Mastronardi are both in the related art of displaying database results to a user.

It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo and Mastronardi before him/her, to have modified the system of Szabo with the display of an album title from Mastronardi, in order to make the album title one of the possible pieces of information about a record in a result set.

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As to **Claim 6**, Szabo does not appear to explicitly disclose the limitation of displaying at least one track name.

Mastronardi discloses displaying at least one track name (col. 1, lines 14 – 16, referring to displaying the titles of the works of music, making the song title one of the possible pieces of information about a record in a result set).

Szabo and Mastronardi are both in the related art of displaying database results to a user.

It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo and Mastronardi before him/her, to have modified the system of Szabo with the display of a song title from Mastronardi, in order to make the song title one of the possible pieces of information about a record in a result set.

As to **Claim 7**, Szabo does not appear to explicitly disclose the limitation of displaying at least one cover graphic.

Mastronardi discloses displaying at least one cover graphic (col. 6, lines 4 – 5, referring to the display of an album cover graphic, making the cover one of the possible pieces of information about a record in a result set).

Szabo and Mastronardi are both in the related art of displaying database results to a user.

It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo and Mastronardi before him/her, to have modified the system of Szabo with the display of an cover from Mastronardi, in order to make the cover one of the possible pieces of information about a record in a result set.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Szabo, in view of Proehl, et al., U.S. Pat. No. 6,118,450 (hereafter, "Proehl").

As to **Claim 4**, Szabo does not appear to explicitly disclose the limitation of: displaying at least one playlist title.

Proehl discloses: displaying at least one playlist title (Figs. 4 and 8, and col. 8, lines 44 – 50, referring to the display of a playlist title, making the playlist title of the possible pieces of information about a record in a result set).

Szabo and Proehl are both in the related art of displaying database results to a user.

It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo and Proehl before him/her to have modified the system of Szabo with the display of playlist titles from Proehl, in order to make the playlist title one of the possible pieces of information about a record in a result set.

9. Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Szabo, in view of Teng, et al., U.S. Pat. No. 5,930,473 (hereafter, "Teng").

As to **Claim 5**, Szabo does not appear to explicitly disclose the limitation of displaying at least one movie title.

Teng discloses: displaying at least one movie title (col. 13, line 63 through col. 14, line 8, referring to the display of movie identification, making the movie title of the possible pieces of information about a record in a result set).

Szabo and Teng are both in the related art of displaying database results to a user.

It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo and Teng before him/her, to have

modified the system of Szabo with the display of movie titles from Teng, in order to make movie titles one of the possible pieces of information about a record in a result set.

10. Claims 8 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Szabo, in view of Wehmeyer, U.S. Pat. No. 6,031,795 (hereafter, "Wehmeyer").

As to **Claim 8**, Szabo does not appear to explicitly disclose the limitation of: selecting metadata records that fall within a consecutive range in the overall collection based on a predetermined ordering method.

Wehmeyer discloses: selecting metadata records that fall within a consecutive range in the overall collection based on a predetermined ordering method (col. 6, lines 53 – 56, referring to a sorted list of results, allowing for efficiency in user selection).

Szabo and Wehmeyer are both in the related art of displaying database results to a user.

It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo and Wehmeyer before him/her, to

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have modified the system of Szabo with the use of an ordering method from Wehmeyer, in order to increase the efficiency of user selections.

As to **Claim 9**, Szabo, as modified, discloses alphabetic ordering based on artist name followed by album name (col. 6, lines 53 – 56, referring to alphabetical ordering of tracks).

11. Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Szabo in view of Wehmeyer, and further in view of Sampson, U.S. Pat. No. 5,390,113 (hereafter, "Sampson").

As to **Claim 10**, Szabo, as modified, discloses identifying the candidate set based on an initial search (Szabo, col. 9, lines 27 – 33, referring to a broad search and a resulting data set that is to be further refined).

Szabo, as modified, does not appear to explicitly disclose the limitation of: obtaining a sparse map of the remote database.

Sampson discloses: obtaining a sparse map of the remote database; and identifying a result set based on the sparse map (col. 4, lines 41 – 43, referring to a sparse matrix being used for searching for records, increasing the efficiency of the searching process).

Szabo, Wehmeyer, and Sampson, are all in the related art of generating database query results.

It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo, Wehmeyer, and Sampson before him/her, to have further modified the system of Szabo with the use of a sparse map from Sampson, in order to increase the efficiency of the searching process.

12. Claims 1 – 13 and 16 – 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Szabo, in view of Wehmeyer, Mastronardi, and Sampson.

As to **Claim 11**, Szabo discloses: a method for accessing information from an overall collection of metadata records, wherein each metadata record in the overall collection includes information regarding a particular digital media source (col. 9, lines 27 – 33, referring to types of files for which the system is applicable, images and audio being two), and wherein the overall collection including a local database of metadata records and a remote database of metadata records (col. 6, lines 40 – 54, referring to local and remote databases), the method comprising:

in response to user interaction with a user interface, the user interface requesting particular records (col. 6, lines 40 – 54, referring to user-defined selection criteria);

identifying a candidate set of metadata records; retrieving the candidate set of metadata records from the remote database; merging the remote set and the local set to produce a merged set of metadata records (col. 7, lines 43 – 67, referring to generating a result set from each database based on selection criteria and merging those sets);

providing the merged set of metadata records to the user interface; the user interface displaying selected information from at least one metadata record in the merged set (col. 25, lines 31 – 43, referring to displaying to the user, via the interface, the result sets and selection criteria).

Szabo does not appear to explicitly disclose the limitations of: each metadata record in the local database being associated with a local record number based on its order in the local database and a collection record number based on its order in the overall collection, each metadata record in the remote database being associated with a remote record number based on its order in the remote database and a collection record number based on its order in the overall collection, the user interface requesting a specified range of N collection record numbers, obtaining a sparse map of the remote database; identifying based on the sparse map, identifying a remote set of metadata records in the candidate set

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that have collection record numbers in the specified range; or identifying a local set of metadata records in the local database that have collection record numbers in the specified range.

Wehmeyer discloses: each metadata record in the local database being associated with a local record number based on its order in the local database and a collection record number based on its order in the overall collection, each metadata record in the remote database being associated with a remote record number based on its order in the remote database and a collection record number based on its order in the overall collection (col. 1, lines 40 – 44, referring to track numbers and slot numbers, track numbers reading on record numbers in the local or remote databases, and combination of slot numbers and track numbers reading on a record number in the overall collection);

Wehmeyer does not appear to explicitly disclose the limitations of:

- the user interface requesting a specified range of N collection record numbers;
- obtaining a sparse map of the remote database;
- identifying a candidate set of metadata records based on the sparse map;
- identifying a remote set of metadata records in the candidate set that have collection record numbers in the specified range; or
- identifying a local set of metadata records in the local database that have collection record numbers in the specified range.

Mastronardi discloses: the user interface requesting a specified range of N collection record numbers (col. 2, lines 26 - 32, referring to selection of records based on index);

identifying a remote set of metadata records in the candidate set that have collection record numbers in the specified range (col. 2, lines 26 - 32, referring to a range of indexes); or

identifying a local set of metadata records in the local database that have collection record numbers in the specified range (col. 2, lines 26 - 32, referring to a range of indexes).

Mastronardi does not appear to explicitly disclose the limitations of: obtaining a sparse map of the remote database; or

identifying a candidate set of metadata records based on the sparse map.

Sampson discloses: obtaining a sparse map of the remote database; and

identifying a candidate set of metadata records based on the sparse map (col. 4, lines 41 – 43, referring to a sparse matrix being used for searching for records, increasing the efficiency of the searching process).

Szabo, Wehmeyer, Mastronardi, and Sampson are all in the related art of generating database query results.

It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo, Wehmeyer, Mastronardi, and Sampson before him/her, to have modified the system of Szabo with the record numbers of Wehmeyer, the ranges of Mastronardi, and the sparse mapping of Sampson, in order to have unique identifiers for records, to increase the efficiency of user searches, and to increase the efficiency of the searching process.

As to **Claim 12**, Szabo, as modified, discloses: displaying at least one artist name (Mastronardi, col. 6, lines 8 – 9, referring to a display section that shows the artist name or group).

As to **Claim 13**, Szabo, as modified, discloses: displaying at least one album title (Mastronardi, col. 6, lines 5 – 7, referring to a display section that shows the album title).

As to **Claim 16**, Szabo, as modified, discloses: displaying at least one track name (Mastronardi, col. 1, lines 14 – 16, referring to displaying the titles of the works of music).

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As to **Claim 17**, Szabo, as modified, discloses: displaying at least one cover graphic (Mastronardi, col. 6, lines 4 – 5, referring to the display of an album cover graphic).

As to **Claim 18**, Szabo, as modified, discloses: retrieving every S^{th} metadata record in the remote database to obtain a sparse set of metadata records (Sampson, col. 10, lines 39 – 52, referring to the retrieval of a flat file, which is a slice of a 3-dimensional data structure, said slice reading on every S^{th} record).

As to **Claim 19**, Szabo, as modified, discloses: identifying a greatest lower bound metadata record in the sparse set by identifying which metadata record in the sparse set has the highest collection record number that does not exceed the lowest collection record number in the specified range (Sampson, col. 10, lines 39 – 52, referring to tallying entries to an incremented summary) ; and identifying a set of $N+S$ consecutive remote record numbers, beginning with the remote record number of the greatest lower bound metadata record (Sampson, col. 10, lines 39 – 52, referring to variable-length combinations results).

13. Claim 14 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Szabo, in view of Wehmeyer, Mastronardi, and Sampson, and further in view of Proehl.

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As to **Claim 14**, Szabo, as modified, does not appear to explicitly disclose the limitation of: displaying at least one playlist title.

Proehl discloses: displaying at least one playlist title (Figs. 4 and 8, and col. 8, lines 44 – 50, referring to the display of a playlist title, making the playlist title of the possible pieces of information about a record in a result set).

Szabo, Wehmeyer, Mastronardi, Sampson and Proehl are both in the related art of displaying database results to a user.

It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo, Wehmeyer, Mastronardi, Sampson and Proehl before him/her to have further modified the system of Szabo with the display of playlist titles from Proehl, in order to make the playlist title one of the possible pieces of information about a record in a result set.

14. Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Szabo, in view of Wehmeyer, Mastronardi, and Sampson, and further in view of Teng.

As to **Claim 15**, Szabo, as modified, does not appear to explicitly disclose the limitation of displaying at least one movie title.

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Teng discloses: displaying at least one movie title (col. 13, line 63 through col. 14, line 8, referring to the display of movie identification, making the movie title of the possible pieces of information about a record in a result set).

Szabo, Wehmeyer, Mastronardi, Sampson and Teng are both in the related art of displaying database results to a user.

It would have been obvious to one having ordinary skill in this art at the time of the invention, having the teachings of Szabo, Wehmeyer, Mastronardi, Sampson and Teng before him/her, to have further modified the system of Szabo with the display of movie titles from Teng, in order to make movie titles one of the possible pieces of information about a record in a result set.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nirav K. Khakhar whose telephone number is (571) 270-1004. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on (571) 272-7079. The fax phone


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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nirav K Khakhar
Examiner
Art Unit 2167

nk NK 6/21/07


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